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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/470,116	12/22/1999	RODNEY CLAYCOMB	DDX13	5798

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DORSEY & WHITNEY, LLP  
INTELLECTUAL PROPERTY DEPARTMENT  
370 SEVENTEENTH STREET  
SUITE 4700  
DENVER, CO 80202-5647

EXAMINER
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NATNITHITHADHA, NAVIN

ART UNIT	PAPER NUMBER
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3736

DATE MAILED: 02/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/470,116

Applicant(s)

CLAYCOMB ET AL.

Examiner

Navin Natnithithadha

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Examiner's Comments***

1. Claims 1, 2, 7, 9, 11, 12, and 13 have been amended.
2. Claims 20 and 21 are canceled.
3. Claims 1-19 are pending.

### ***Drawings***

4. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the drawings are informal. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### ***Claim Objections***

5. Claim 11 is objected to because of the following informalities:

The claim contains two sentences. It appears that the claim was incorrectly amended in attempting to make claim 11 dependent on claim 1. Did the Applicant attempt to delete the second sentence? Appropriate correction is required.

6. Claims 20 and 21 are objected to because of the following informalities:

The canceled claims contain text, which need to be deleted. Canceled claims need only have claim identifiers. Appropriate correction is required.

### ***Response to Arguments***

7. Applicant's arguments filed November 15, 2004 have been fully considered but they are not persuasive.

Claims 1-5, 7-10, and 21 were rejected under 35 U.S.C. 102 (b) as anticipated by Blair, US 4,895,165 A. The Applicant stated the following in traversal to this rejection:

*Blair does not suggest or teach a self-contained electronic estrus device for indicating optimum breeding time. Rather Blair recites a detector that shows the total number of mounts and the sum of the total times elapsed during each sensed mount taken together (see col. 1, lines 57-66). Blair does not compare the detected information to threshold information that is indicative of optimum breeding time. This is not an indication of optimum breeding time, as claimed in amended claim 1, but rather an indication of the function of number of mounts and sum of total times elapsed during any sensed mount taken together.*

However, Blair teaches a device containing an indicating means (an output display) to show an estrus condition (see col. 1, lines 57-66). Figure 2 and column 2, lines 61-66, illustrate a self-contained processing unit (electronic means) 2. In column 1, line 66 to column 2, line 3, Blair states that "the indicating means also indicates the time elapsed since the first satisfaction of the user-programmed MSI". The MSI, mount-second index, is a predetermined threshold related to the total sum of mount times as well as to the total number of mounts (see col. 1, lines 63-66). The disclosure is sufficient to teach "an indication of optimum breeding time" because "indicating the elapsed time" of estrus would be an indication of the optimum time for the animal to breed, since

breeding should occur when an animal is in estrus. Therefore, the Examiner respectfully MAINTAINS the rejection to claim 1. The rejection to claims 2-4 and 7-10 are also maintained because the Applicant did not respond the rejection of the subject matter in these claims.

Claims 6 and 11-19 were rejected under 35 U.S.C. 103 (a) as anticipated by Blair, US 4,895,165 A, in view of Starzl et al, US 5,542,431 A. The Applicant stated the following in traversal of this rejection:

*As noted above, Blair recites a detector that shows the total number of mounts and the sum of the total times elapsed during each sensed mount, taken together (see col. 1, lines 57-66). This is not an indication of optimum breeding time, as claimed in amended claim 1, but rather an indication of the function of number of mounts and sum of total times elapsed during any sensed mount taken together.*

In essence, the Applicant's traversal of the 35 U.S.C. 103 (a) rejection is the same as the traversal of the 35 U.S.C. 102 (b) rejection in stating that the Blair does not teach indicating optimum breeding time. However, as stated above, the Blair does in fact teach indicating optimum breeding time. Since the Applicant did not respond to the rejection of the subject matter in claims 6 and 11-19, the rejection of these claims is respectfully MAINTAINED.

#### ***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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8. Claims 1-5 and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Blair, US 4,895,165 A.

Claim 1: Blair discloses a self-contained electronic estrus detection device for optimum breeding time calculation and indication (see abstract) comprising:

a housing (detector) 10 for releasable placement on an animal (see figs. 1(a) and 1(b) below and see col. 2, lines 64-66); and

an electronic means (processing unit) 2 operatively associated with the housing 10 for detecting and processing information relating to number, duration, and frequency of mounts on the animal, the electronic means 2 calculating and indicating optimum time to breed based on the information (see col. 1, line 57 to col. 2, line 3; col. 3, lines 21-32 and 39-46; col. 3, line 62 to col. 4, line 5; and col. 5, lines 18-21).

Claim 2: Blair discloses the electronic means 2 further processes information to determine if the duration of the mounts meet a preset threshold of time (see col. 3, lines 21-36) and if a preset number of the mounts occur within a predetermined period of time (see col. 1, line 66 to col. 2, line 3 and col. 3, line 60 to col. 4, line 5).

Claims 3-5, 7, 8, and 10: Blair discloses the electronic means includes: a microprocessor (processing unit) 2 (see col. 2, lines 64-66), a battery (see col. 3, lines 2-3), a pressure sensitive switch (tapeswitch) 1 (see col. 2, lines 61-62), a visible display means 4 (see col. 2, lines 52-53), and a reset means (reset switch) 3 for resetting the electronic means (see col. 2, line 67 to col. 3, line 2).

Claim 9: Blair discloses the housing is hermetically sealed (see col. 2, lines 64-66).

Claim 21: Blair discloses a self-contained electronic estrus detection device for optimum breeding time calculation and indication (see abstract) comprising:

a housing (detector) 10 for releasable placement on an animal (see figs. 1(a) and 1(b) above and see col. 2, lines 64-66);

an electronic means (processing unit) 2 operatively associated with the housing 10 for detecting and processing information relating to number, duration, and frequency of mounts on the animal (see col. 1, line 57 to col. 2, line 3; col. 3, lines 21-32 and 39-46; col. 3, line 62 to col. 4, line 5; and col. 5, lines 18-21); and

an indicating means 30 for indicating the beginning and end of optimum time to breed based on the information (see col. 3, line 60 to col. 4, line 5).

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 6 and 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blair, US 4,895,165 A in view of Starzl et al, US 5,542,431 A.

Claim 6: Blair does not disclose the electronic means further calculates and indicates suspect estrus and confirmed estrus. However, Starzl et al disclose an electronic means indicates suspect estrus (identifying the onset of estrus) and confirmed estrus (determining the peak estrus) (see col. 4, lines 44-59). It would have been obvious for one of ordinary skill in the art to modify Blair's device with Starzl et al because Blair suggest in column 5, lines 48-50 that the device can be easily adapted to

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different applications, such as indicating suspect estrus and confirmed estrus from the data obtained, by merely making slight changes to the electronic means (circuit) and indicating means in Blair's device.

Claims 11-14: Starzl et al disclose (see col. 4, lines 44-67) estrus is determined by the duration of a first mount meeting and the preset threshold of time; confirmed estrus is determined by the duration of the mounts meeting the preset threshold of time and the preset number of the mounts occurring within a predetermined period of time; and the optimum breeding time is a predetermined range of time from the first and the preset number of the mounts meeting the preset threshold and occurring within the predetermined period of time. It would have been obvious for one of ordinary skill in the art to modify Blair's device with Starzl et al because Blair suggest in column 5, lines 48-50 that the device can be easily adapted to different applications, such as indicating suspect estrus and confirmed estrus from the data obtained, by merely making slight changes to the electronic means (circuit) and indicating means in Blair's device.

Claim 15: Blair discloses the indicating means 30 located on the rear of the housing and comprises at least one LED (see fig. 6).

Claims 16 and 17: Blair discloses the indicating means comprises LED's for (see fig. 6). He does not disclose the LED's indicating either suspect estrus and confirmed estrus. However, Starzl et al discloses indicating suspect estrus, confirmed estrus and optimum time to breed (see col. 4, lines 44-67). It would have been obvious for one of ordinary skill in the art to modify Blair's device with Starzl et al because Blair suggest in column 5, lines 48-50 that the device can be easily adapted to different applications,



such as indicating suspect estrus and confirmed estrus from the data obtained, by merely making slight changes to the electronic means (circuit) and indicating means in Blair's device.

Claims 18 and 19: Starzl et al disclose the preset threshold for mounting and the preset number of mounts for a period of time for peak estrus (see col. 4, lines 44-67). It would have been obvious for one of ordinary skill in the art to modify Blair's device with Starzl et al because Blair suggest in column 5, lines 48-50 that the device can be easily adapted to different applications, such as indicating suspect estrus and confirmed estrus from the data obtained, by merely making slight changes to the electronic means (circuit) and indicating means in Blair's device.

### ***Conclusion***


10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Navin Natnithithadha whose telephone number is (571) 272-4732. The examiner can normally be reached on Monday-Friday, 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571) 272-4726. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Navin Natnithithadha  
Patent Examiner  
GAU 3736  
February 4, 2005



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